

IN THE CLAIMS

Please cancel Claims 39-48 without prejudice to pursue the subjective matter of these claims in subsequent applications without acquiescence of the reasons of rejection stated in the Office Action.

Please amend Claims 1, 6, 16, and 30 as follows:

B1  
1 1. (Amended Twice) A system, comprising:  
2 a computer configured to determine a position and shape of an object of interest from  
3 video images and to characterize activity of said object of interest based on analysis of  
4 changes in said position and said shape over time, wherein said activity of said object of  
5 interest includes eating, rearing, jumping, drinking, running, and lying of said object of  
6 interest.

B2  
sub C1  
1 6. (Amended) A system comprising:  
2 a computer configured to determine a position and shape of an object of interest from  
3 video images and to characterize activity of said object of interest based on analysis of  
4 changes in said position and said shape over time;  
5 wherein said computer includes an object identification and segregation module  
6 receiving said video images; and  
7 wherein said object identification and segregation module operates using a  
8 background subtraction algorithm in which a plurality of said video images are grouped into a  
9 set, a standard deviation map of the set of video images is created, a bounding box where a  
10 variation is greater than a predetermined threshold is remove from said set of video images,  
11 and the set of images less said bounding boxes is averaged to produce a back ground image.

B3

1 16. (Amended Twice) A method of characterizing activity of an object using a computer,  
2 comprising:  
3 detecting a foreground object of interest in video images;  
4 tracking said foreground object over a plurality of said video images;  
5 classifying said foreground object in said plurality of video images; and  
6 characterizing said activity of said foreground object based on comparison of said  
7 classifications to activity of a standard object, wherein the characterizing said activity of said  
8 foreground object further includes identifying a motion activity of said foreground object  
9 when said classification matches with a motion activity of a standard object.

Sub C1  
B4

1 30. (Amended) A method of characterizing activity of an object using a computer  
2 comprising:  
3 detecting a foreground object of interest in video images;  
4 tracking said foreground object over a plurality of said video images;  
5 classifying said foreground object in said plurality of video images; and  
6 characterizing said activity of said foreground object based on comparison of said  
7 classifications to activity of a standard object; wherein said characterizing said  
8 activity includes:  
9 describing a sequence of postures as behavior primitives; and  
10 aggregating behavior primitives into actual behavior over a range of images;  
11 wherein said describing said behavior primitives further includes:  
12 identifying patterns of postures over a sequence of images; and  
13 analyzing temporal information selected from the group consisting of direction  
14 and magnitude of movement of the centroid, increase and decrease of  
15 the eccentricity, increase and decrease of the area, increase and  
16 decrease of the aspect ratio of the bounding box, change in the b-spline

B4  
Concl.  
Sketch  
Concl.

17

representation points, change in the convex hull points, and direction

18

and magnitude of corner points.

A marked up copy of the claims showing the amendments is attached in an Appendix to the Reply. The attached page is entitled "Version with Markings to Show Changes Made."

### REMARKS

5 Reconsideration of this application is respectfully requested.

Claims 39-48 are canceled without prejudice. Claims 1-38 are currently pending in the application. Claims 1, 6, 16, and 30 have been amended. The amendment is made without acquiescence in the Examiner's reasons for rejection or prejudice to pursue the subject matter in a related application. No new matter has been added. The support of the amendment can be found in the claims and application.

Applicants thank the Examiner's acknowledgement that Claims 6-9, 30 and 36-38 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." See page 6 of the Office Action. Accordingly, Claims 6 and 30 have been rewritten in independent form including all of the limitations of the base claim and any intervening claims. As such, Applicants respectfully submit that Claims 6-9, 30 and 36-38 are now in condition for allowance.

### Interview Summary Record

Record is made of a telephonic interview between the Examiner and the Applicants' attorney that occurred on January 8, 2003. During the interview, the status of the application and the relevance of the prior art references to the claimed invention were discussed.